

**TEACHER
PROFESSIONAL
DEVELOPMENT
THROUGH CHEMISTRY
LESSON STUDY AT
TANJUNGSARI**

LILIASARI

INDONESIA UNIVERSITY OF EDUCATION

TEACHERS' PROFESSIONAL DEVELOPMENT THROUGH LESSON STUDY



- **GUIDING TEACHERS TO MAKE LESSON PLAN TO INCREASE STUDENTS' HANDS-ON ACTIVITY THAT USING LOW COST LOCAL MATERIAL**
- **EXPANDING TEACHERS' SCIENCE KNOWLEDGE AND ABILITY TO ACCESS FURTHER KNOWLEDGE**
- **INVOLVING TEACHERS ON LESSON REFLECTION**
- **ENCOURAGING AND SUPPORTING TEACHERS IN EFFORTS TO COLLABORATE**

THREE CYCLES OF CHEMISTRY LESSON STUDY



- **SMPN TANJUNGSARI I: MARCH 3, 2007**
- **SMPN TANJUNGSARI II: MAY 26, 2007**
- **SMPN PAMULIHAN I: NOVEMBER 10, 2007**
- **TEACHER BACKGROUND: BACHELOR IN PHYSICS AND BIOLOGY EDUCATION**
- **PARTICIPANTS: 20-24 TEACHERS, 2 MGMP FASILITATORS**
- **FOCUS: IMPLEMENTATION & REFLECTION**

THE IMPLEMENTATION OF LESSON PLANS



- **TOPICS: MIXTURE SEPARATION (2X) & CHARACTERISTICS OF CHEMICAL REACTION (1X)**
- **LEARNING PROCESS:**
 - 1. STUDENTS' ACTIVITIES & LESSON LEARNT**
 - 2. OBSERVERS' INVOLVEMENT & VIDEO SHOOTING**

ABOUT THE TOPICS

MIXTURE SEPARATION & CHARACTERISTICS OF CHEMICAL REACTION

- ❑ ***DIFFERENCIES:*** MODELS PROBLEM BASED LEARNING IN THE FIRST CYCLE CHANGE TO PROBLEM SOLVING IN THE THIRD CYCLE
- ❑ ***SIMILARITIES:*** HANDS-ON ACTIVITY, LOCAL MATERIAL, CONTEXTUAL
- ❑ ***IMPROVEMENTS:*** TIME SPENT MORE PRECISELY, FROM CONCEPTS ATTAINMENT TO CONCEPTS APPLICATION ON THE THIRD CYCLE



ABOUT STUDENTS' ACTIVITIES



- **STUDENTS WORKED IN GROUPS OF 4-5 PERSONS**
- **STUDENTS HAD A DISCUSSION BEFORE LAB ACTIVITIES**
- **STUDENTS FILL IN WORKSHEET (ONE FOR EACH GROUP TO ALL STUDENTS HAVE EACH)**
- **TIME LIMITED MAKE STUDENTS NEVER MADE FURTHER INVESTIGATION**
- **ONE STUDENT OF EACH GROUP PRESENTED EXPERIMENTS' RESULTS IN FRONT OF THE CLASS, AND OTHERS LISTENED**
- **STUDENTS NEVER RESPONDED TO TEACHER REFLECTION OR REVIEW AT THE END OF THE LESSON, BECAUSE THEY SEEM MORE INTERESTED TO THEIR TEXTBOOK**

ABOUT LESSON LEARNT



- **THE TEACHING QUALITY COULD BE IMPROVED BY COMBINATION OF SEVERAL TEACHING MODEL, SHARED FROM TEACHERS' EXPERIENCES**
- **TEACHERS' QUALITY IMPROVEMENT IN TIME MANAGEMENT DEPENDS ON HOW MANY TIMES THEY TEACH THE SAME TOPIC**
- **Krogh (2001): *EFFECTIVE KNOWLEDGE CREATION DEPENDS ON AN ENABLING CONTEXT***

ABOUT OBSERVER & VIDEO SHOOTING

- **STUDENTS WERE NOT INTERRUPTED BY THE OBSERVERS & VIDEO SHOOTING**
- **OBSERVERS MADE BETTER OBSERVATION WITHOUT COMMUNICATE EACH OTHER ALONG LEARNING PROCESSES**
- **THE QUALITY OF THE OBSERVATION RESULT SHOWED IN THE REFLECTION STAGE**
- **ONLY FEW OBSERVERS HAD INTENSE OBSERVATION ALONG THE LESSON**

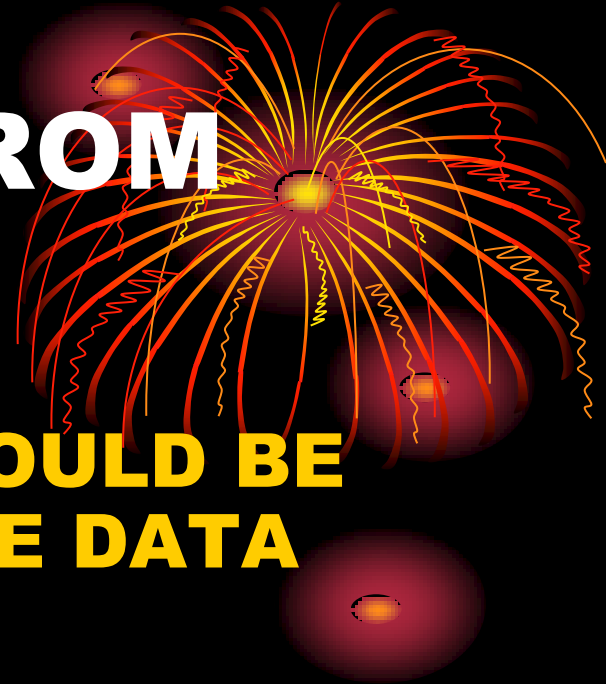


REFLECTION STAGE

- **IN THE BEGINING OF THE DISCUSSION “MODEL TEACHER” EXPRESS HER PERCEPTION ABOUT THE LESSON AND STUDENTS ACTIVITIES**
- **THEN OBSERVERS (OTHER TEACHERS, MGMP FASILITATOR, LECTURER) GAVE THEIR OPINION ABOUT STUDENTS’ LEARNING**
- **THERE ARE DISCUSSION ABOUT ALL COMPONENT OF LESSON STUDY TO GET LESSON IMPROVEMENTS**



LESSON LEARNT FROM REFLECTION



- **OBSERVATION SHEET SHOULD BE IMPROVED TO MAKE MORE DATA RECORDED**
- **TEACHING ASSESSMENT SHOULD BE DISCUSS IN THE LESSON STUDY, NOT ONLY STUDENTS' ACTIVITIES**
- **TEACHING MATERIALS SHOULD BE DEVELOPED FOR MISMATCH TEACHER BACKGROUND TO IMPROVE THEIR CHEMISTRY CONCEPTS**



**THANK YOU VERY MUCH
FOR YOUR ATTENTION**